



## Comparative Impacts of Alternatives A, C, and D

The attached table compares the impacts expected for each alternative in certain categories.

***Please note that none of the impacts in the table are considered "significant," as defined by environmental regulations. In other words, the project team has determined that measures can be taken to mitigate for – or remedy – the predicted impacts.*** The information is useful, however, in comparing the relative impacts of the alternatives being considered.




Topics addressed in the table include:

- Surface Water, Hydrology, and Floodplains
- Vegetation
- Fish, Wildlife, and Habitat
- Hazardous Materials
- Added Travel Time
- Visual Quality
- Estimated Bridge Closure during Construction
- Land Use
- Business Displacement
- Recreation
- Services and Utilities
- Cultural, Historic, and Archaeological Resources

For several topics traditionally evaluated in Environmental Impact Statements, impacts under each alternative were very similar (if not identical) or are not applicable. The following issues are not included in the table:


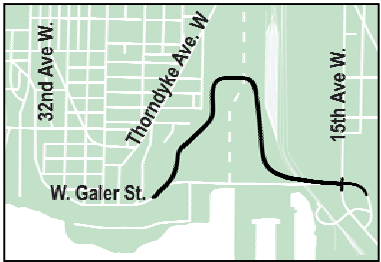

- **Geology, Soils, and Topography:** Risk of landslides and ground liquefaction due to earthquakes would be similar for each option, and would be mitigated with retaining walls and soil densification measures.
- **Wetlands:** No wetlands are in the project area
- **Prime and Unique Farmlands:** No farmlands are in the project area
- **Air Quality:** Standards for carbon monoxide (CO) were met under each alternative
- **Water Quality:** All stormwater runoff, regardless of alternative, would be treated before discharge
- **Residential Displacement:** No residences would be displaced
- **Noise:** The build alternatives would not create any noise impacts that would not also occur in the future under the No Build Alternative.


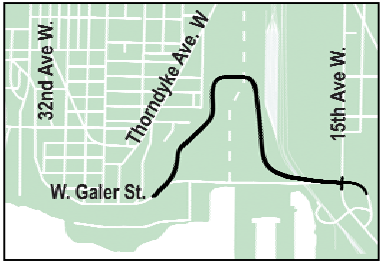

***Please Note:*** These predicted impacts have been submitted to Washington State Department of Transportation and the Federal Highway Administration for review. SDOT is awaiting their approval.


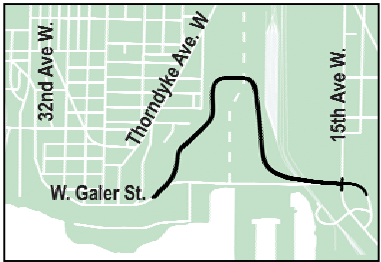

Topic	<b>Alternative A</b> 	<b>Alternative C</b> 	<b>Alternative D</b> 
Estimated Bridge Closure Time	17 months, requiring an 8-minute detour across W Dravus St.	11 months, requiring an 8-minute detour across W Dravus St.	9 months, requiring an 8-minute detour across W Dravus St.
Added Travel Time	Ramp Option <sup>*</sup> : Operates the same as the existing bridge  Intersection Option <sup>*</sup> : Less than 20-second delay at mid-bridge intersection.	Would add half-mile to route  Up to 80-second additional travel time due to added distance and intersection.	Ramp Option <sup>*</sup> : Operates similar to the existing bridge.  Intersection Option <sup>*</sup> : Less than 20-second delay at mid-bridge intersection.


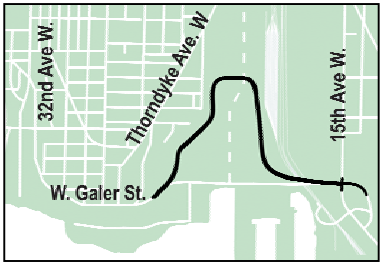

\* Alternatives A and D include two options to provide access from the bridge to the Port of Seattle's property:

- Ramp Option: Provide ramps parallel to the bridge allowing vehicles to merge onto and off of the bridge without a signalized intersection
- Intersection Option: Provide ramps perpendicular to the bridge allowing vehicles to merge onto and off of the bridge at a signalized intersection

Topic	<p><b>Alternative A</b></p> 	<p><b>Alternative C</b></p> 	<p><b>Alternative D</b></p> 
Pedestrian Use and Safety	<p>Ten-foot-wide barrier-separated sidewalk on south side of bridge for pedestrians and 16-foot-wide outside traffic lanes for bicyclists.</p> <p>Intersection Option provides mid-bridge signalized intersection for pedestrians</p> <p>Ramp Option maintains existing pedestrian/vehicle conflict at mid-bridge ramp crossing</p>	<p>Ten-foot-wide barrier-separated sidewalk on south side of alignment for pedestrians and 16-foot wide outside traffic lanes for bicyclists.</p> <p>Half-mile of increased length and 6.5% slope increases walking time by about ten minutes.</p> <p>At-grade crossing is signalized.</p>	<p>Ten-foot-wide barrier-separated sidewalk on south side of bridge for pedestrians and 16-foot-wide outside traffic lanes for bicyclists.</p> <p>Intersection Option provides mid-bridge signalized intersection for pedestrians</p> <p>Ramp Option maintains existing pedestrian/vehicle conflict at mid-bridge ramp crossing</p>
Surface Water, Hydrology, and Floodplains	<p>Project would add 1.2 acres of impervious surface (about 9 small residential lots)</p> <p>~3.2 acres would be in 200-foot shoreline buffer area</p>	<p>Project would add up to 0.2 acres of impervious surface (1-2 small residential lots)</p> <p>~0.2 acres would be in 200-foot shoreline buffer area</p>	<p>Project would remove 0.3 acres of impervious surface from study area</p> <p>No impact to shoreline.</p>

Topic	<p><b>Alternative A</b></p> 	<p><b>Alternative C</b></p> 	<p><b>Alternative D</b></p> 
Vegetation, Fish, Wildlife, and Habitat	<p>~0.1 acre of intertidal vegetation and habitat would be removed for four bridge piers.</p> <p>~0.5 acres of forest habitat would be removed.</p>	<p>A small amount of forest and habitat at the west end of the bridge would be removed.</p>	<p>A small amount of forest and habitat at the west end of the bridge would be removed.</p>
Hazardous Materials	<p>Potential contaminated soil could be disturbed at excavation sites.</p>	<p>Potential contaminated soil could be disturbed at excavation sites.</p> <p>There may be asbestos and lead-based paint in buildings to be demolished.</p>	<p>Potential contaminated soil could be disturbed at excavation sites.</p> <p>There may be asbestos and lead-based paint in buildings to be demolished.</p>
Visual Quality	<p>No difference in views from existing bridge.</p>	<p>Reduction (loss) of views toward Elliott Bay and downtown from bridge. Opens some Port property for waterfront view.</p>	<p>Similar to existing view for drivers; opens some Port property for waterfront view.</p>

Topic	<p><b>Alternative A</b></p> 	<p><b>Alternative C</b></p> 	<p><b>Alternative D</b></p> 
Land Use	<p>Consistent with existing land use policies.</p> <p>Would be constructed in "Shoreline District" (similar to existing bridge).</p>	<p>Consistent with existing land use policies.</p>	<p>Consistent with existing land use policies.</p>
Business Displacement	<p>Potential relocation of one business or creation of alternative access.</p>	<p>Potential relocation of two businesses and one vacant business property.</p> <p>Realignment of loading docks and rail access at a third business.</p>	<p>Potential relocation of three businesses and one vacant business property.</p>
Recreation (impacts to be mitigated through a joint development agreement.)	<p>Bridge would be built over ~0.9 acres of park land, and three bridge piers would be constructed on park land.</p>	<p>Bridge would be built over ~0.3 acres of park land.</p>	<p>Bridge would be built over ~0.3 acres of park land.</p>
Services and Utilities	<p>There would be no change in public services.</p>	<p>Emergency vehicle response distance would increase by 1/2 mile between 15<sup>th</sup> Ave W and Magnolia.</p>	<p>Emergency vehicle response distance would increase by 1/10 mile between 15<sup>th</sup> Ave W and Magnolia.</p>

Topic	<b>Alternative A</b> 	<b>Alternative C</b> 	<b>Alternative D</b> 
Cultural, Historic, and Archaeological Resources	No impacts expected.	Demolition of a shed/warehouse that appears eligible for the National Register of Historic Places.	Demolition of a shed/warehouse that appears eligible for the National Register of Historic Places.
Energy Consumption (in equivalent gallons of fuel)*	Operational: 820 gallons daily  Construction:  Intersection Option: 7.9 million gallons  Ramp Option: 7.1 million gallons	Operational: 1,370 gallons daily  Construction: 6.5 million gallons	Operational – 930 gallons daily  Construction:  Intersection Option: 7.9 million gallons  Ramp Option: 7.3 million gallons

\* “Operational energy consumption” refers to the estimated amount of fuel used per day by motorists driving the bridge, while “construction energy consumption” refers to the equivalent amount of fuel needed to build the bridge (consumed by equipment, etc.).